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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,628	02/24/2004	Xiong Liu	STL11426	2953

7590 07/26/2006
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EXAMINER
NEGRON, DANIEL L

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/785,628

Applicant(s)

LIU ET AL.

Examiner

Daniell L. Negrón

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 and 14-17 is/are allowed.
- 6) ☒ Claim(s) 18-20 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. Examiner acknowledges the request for continued examination (RCE) filed on May 18, 2006.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on May 18, 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Siew et al U.S. Patent Application Publication No. 2002/0027729.

Regarding claim 18, Siew et al disclose a method comprising steps of comparing a track profile (i.e., PES) for a first track to a predetermined threshold (300), and determining a head positioning profile (i.e., ZAP) for the first track in relation to the track profile for the first track in response to the comparison (paragraph 34).

Regarding claims 19 and 20, Siew et al disclose a method wherein the head positioning profile of the determining step is further determined in relation to a track profile for a second track and third track (i.e., all tracks, see paragraph 38).

Allowable Subject Matter

5. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 21, prior art fails to disclose or suggest a method comprising the steps of claims 18-20, wherein a track profile is represented by WI, the first track is represented by n, the second track is represented by n-1, and the third track is represented by n+1, the head positioning profile is represented by ZAP(n), and wherein $ZAP(n) = -WI(n) - \alpha * \{WI(n-1) + WI(n+1)\}$, wherein alpha is a value between 0 and 1.

6. Claims 1-12 and 14-16 are allowed.

Regarding claims 1-5, and 14, claim 1 discloses a method comprising sequential steps of comparing a track profile for a first track to a predetermined threshold, and determining, in relation to the comparison, a head positioning profile for the first track in relation to a track profile for the first track and a track profile for a second track, which is neither disclosed or an obvious variation of the prior art.

Regarding claims 6-10, 15, and 16, claim 6 discloses a method for compensating for positioning errors in a data storage device comprising a step of determining a head positioning profile for a first track in relation to a track profile for the first track in combination with a track profile for a second track and a non-zero weighting value, which is neither disclosed or an obvious variation of the prior art.

Regarding claims 11, 12, and 17, reasons for allowance are as discussed in the previous Office action mailed January 18, 2006.

Response to Arguments


7. Applicant's arguments, see pages 10-12, filed May 18, 2006, with respect to claims 1-10 and 14-16 have been fully considered and are persuasive. The rejection of the claims has been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniell L. Negrón whose telephone number is 571-272-7559. The examiner can normally be reached on Monday-Friday (8:30am-5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DLN 
July 18, 2006


WAYNE YOUNG
SUPERVISORY PATENT EXAMINER